

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A tilt control method in an optical pickup including a tilt adjustment coil for adjusting the tilt of an objective lens, comprising the steps of:
 - recording an offset adjustment signal in a test recording area provided on an optical disc,
 - wherein said offset adjustment signal is recorded while modifying a driving signal level supplied to said tilt adjustment coil;
 - thereafter playing back an RF signal of said offset adjustment signal that was recorded on the optical disc; and
 - detecting a positive peak level (A1) and a negative peak level (A2) in the RF signal of said offset adjustment signal that was played back, and setting said driving signal level, when a β value obtained from $\beta = (A1+A2)/(A1-A2)$ reaches a maximum, as an offset value for the driving signal to be supplied to the tilt adjustment coil.
2. (Original) A tilt control method according to claim 1, wherein:
 - the tilt control is performed by adding the set offset value to a tilt signal for performing tilt control and supplying the added signal to said tilt adjustment coil.

3. (Original) A tilt control apparatus for adjusting the tilt of an objective lens in an optical pickup comprising:

a signal recording circuit for recording a signal by irradiating light onto a disc via said objective lens;

a photo detector circuit for obtaining an RF signal by detecting reflected light from the disc via said objective lens;

a beta value detector circuit for detecting a positive peak level (A1) and a minus peak level (A2) in the RF signal from said photo detector circuit, and detecting the β value obtained from $\beta = (A1+A2)/(A1-A2)$;

a tilt control coil for controlling the tilt of said objective lens; and

a tilt control circuit for controlling the driving signal level supplied to said tilt adjustment coil;

an offset adjustment signal is written to the disc by recording a signal to the disc by said signal recording circuit while said tilt control circuit modifies the driving signal level to the tilt control coil, and the relationship between driving signal level and recording position is stored;

said photo detector circuit detects an RF signal of the offset adjustment signal that was recorded on the disc;

said beta value detector circuit detects a β value; and

the tilt control circuit uses the driving signal level for the tilt control coil corresponding to the maximum of the detected β value as an offset value for tilt control.

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4. (Original) A tilt control circuit according to claim 3, wherein:

said tilt control circuit performs tilt control by adding said offset value to a tilt signal for performing tilt control and supplying this to said tilt adjustment coil.